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August 10, 1995

BY HAND

Mr. William F. Caton, Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: Petition for Reconsideration in
CC Docket No. 92-115 -- Ex Parte Presentation

Dear Mr. Caton:

This is to provide notice, pursuant to Section 1.1206 of the Commission's Rules, that C-Two-Plus Technology, Inc. ("C2+") delivered today the attached letter and exhibits to Regina M. Keeney, Chief of Commission's Wireless Telecommunications Bureau ("Bureau"). An original and two copies of this letter and the attachments are being submitted for inclusion in the above-referenced docket.

The letter to Ms. Keeney and the exhibits are being submitted in response to the Bureau's request at the July 27, 1995 meeting which it convened to discuss various issues raised in the pending petitions for reconsideration in the above-referenced proceeding. At the Bureau's request, copies of the letter and the exhibits are being served on the parties indicated in the certificate of service attached to the letter.

If you have any questions regarding this matter, please contact me.

Very truly yours,

Timothy J. Fitzgibbon
Counsel for
C-Two-Plus Technology

TJF:kdd
Enclosure
cc: Regina M. Keeney, Esquire

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August 10, 1995

BY HAND

Regina M. Keeney, Esquire
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

Re: C-Two-Plus Technology, Inc.
Petition for Reconsideration
CC Docket No. 92-115

Dear Regina:

This is to follow-up on the meeting convened by the Wireless Telecommunications Bureau on July 27, 1995 to discuss the pending petitions for reconsideration of the Commission's Report and Order, 9 FCC Rcd. 6513 (1994), particularly Paragraphs 54-63 and new Rule §22.919 concerning Electronic Serial Numbers ("ESNs"). On behalf of C-Two-Plus Technology, Inc. ("C2+"), we appreciate the Bureau's efforts in bringing the parties together to discuss the issues raised in the pending petitions.

At the request of the Bureau, we have prepared the revised proposed Rule §22.919 attached as Exhibit 1, which we believe will significantly benefit cellular consumers, increase airtime revenues for carriers, and preserve and enhance anti-fraud efforts. In order to facilitate consideration and discussion of our proposal, we have attached as Exhibit 2 a brief explanation of the rationale for each provision of the proposed rule. Finally, we have attached as Exhibit 3 various "Additional Restrictions" which could be incorporated into the rules, set forth in the Commission's decision on reconsideration, or otherwise implemented if the

parties agree that any or all of those provisions will assist in combatting cellular fraud. We have included a brief explanation of the rationale for each Additional Restriction.

We believe that the public interest requires significant modification of Rule 22.919 and the Report and Order, particularly Paragraphs 60-62 (which were referred to at the July 27 meeting as the "Policy Statement on Altering the ESN of a Cellular Telephone or Knowing Use of a Cellular Telephone with Altered ESN"). Although we do not concede that Paragraphs 60-62 of the Report and Order constitute a formal Policy Statement by the Commission, we will use that term here for convenience only. With the exception of the Cellular Telecommunications Industry Association ("CTIA") and McCaw Cellular Communications, Inc. ("McCaw"), the parties at the July 27 meeting agreed that the current rule and "Policy Statement" will: (a) have little or no effect in achieving their stated purpose of fighting cellular fraud; and (b) deny significant benefits to legitimate cellular subscribers.

The positions stated by Telecommunications Industry Association ("TIA") at the July 27 meeting were consistent with the prior statements of the manufacturers in this proceeding. For example, TIA has stated that Section 22.919 is "an expensive and ineffective method of fighting cellular fraud" which "will never be successful" and "will substantially increase the cost, and decrease the quality of service and equipment, to consumers." TIA Petition for Clarification and Reconsideration, filed Dec. 19, 1994 ("TIA Petition") at iii-iv. Ericsson Corporation ("Ericsson") also has stated that by prohibiting all ESN transfers, Section 22.919 "will cause significant hardship to consumers, cellular carriers and manufacturers, without any significant corresponding increase in the cellular industry's ability to meaningfully combat fraud." Ericsson Petition for Reconsideration, filed Dec. 19, 1994 ("Ericsson Petition") at 3-4. Matsushita Communications Industrial Corporation of America ("Matsushita") previously stated that a ban on all ESN transfers "would impose substantial costs and inconvenience on manufacturers and, more importantly, on cellular phone subscribers" without adding significantly to fraud prevention. Matsushita Comments in Support of Petitions for Reconsideration, filed Jan. 20, 1995 at 3.

Dr. Richard Levine, a cellular expert retained by C2+, reached the same conclusions: "Neither the present wording of Rule 22.919 nor the proposed modifications sug-

gested by the TIA and CTIA will advance the cause of fraud prevention or inhibit fraudulent cloning of cellular telephone sets, but instead will deny legitimate uses of modified ESN such as emulated extension service." R.C. Levine, "Report on ESN Emulation and Cellular Phone Extension Service," submitted by C2+ on July 7, 1995 ("Levine Report") at 3. Moreover, Dr. Levine concluded that "the use of emulated extensions provides a technologically superior method for providing extension service" as compared to the "Multiple Units Same Directory Number" ("MUSDN") service offered by the carriers. Id. at 2. Significantly, CTIA represented at the July 27 meeting that it had no real dispute with the Levine Report.

Finally, the Commission's "Policy Statement" must be modified because it is wholly unsupported by the record in the rulemaking proceeding, inconsistent with existing Commission practice, and has been used by the carriers as a weapon to attempt to drive C2+ and other providers of emulated extension service out of business. Although the carriers claim that the current "Policy Statement" is merely a reiteration of similar statements made in a 1991 Public Notice and a 1993 Letter from the Mobile Services Division to CTIA (see Tab Nos. 6 and 8 of the three-ring binder distributed by CTIA at the July 27 meeting), the fact is that those statements were aimed at fraudulent ESN transfers performed without the knowledge or consent of the subscriber in order to place calls which would be billed to unsuspecting subscribers or unable to be billed at all. Significantly, the 1993 Letter was issued only after CTIA erroneously stated in ex parte meetings with the Commission staff during the course of the rulemaking proceeding that C2+ represented "a potential threat" of fraudulent "cloning of cellular ESNs on a scale heretofore not possible." See C2+ Reply to CTIA Opposition to Petition for Reconsideration, filed Feb. 2, 1995 at 4-7 and Appendix 1, Exhibit B at 1.

In fact, the Commission has never applied any of those previous statements to prohibit the transfer of an ESN from one mobile station, owned by a subscriber and properly registered with the cellular carrier, to another mobile station to be used by the same subscriber. For example, the record in the rulemaking proceeding clearly demonstrates that TIA members for years have transferred ESNs from one cellular phone to another as part of their standard repair procedures, a fact which has been well known to the Commission at least since 1992. Yet, the Commission has never interpreted the provisions of the 1991 Public Notice or the 1993 Mobile Services Division Letter to prohibit such transfers.

To the contrary, these transfers have been encouraged by the carriers and have not been prohibited by the Commission because they are not fraudulent and they result in substantial benefits for consumers. The record unequivocally establishes that the manufacturers' ESN transfer repair program: (a) was "developed at the insistence of cellular carriers who do not want their subscribers inconvenienced in any manner;" (b) "has been positively accepted by a number of cellular service providers, as well as the cellular user public;" and (c) has been expressly permitted under "the equipment certification program currently operated by CTIA." See Ericsson Petition at 4, n.4; Reply Comments of Motorola, Inc., filed Nov. 5, 1992 at 2-3. The same considerations of efficiency, convenience and non-fraudulent use should apply to the ESN transfers performed by C2+ in order to provide cellular extension services to legitimate subscribers. Nevertheless, the carriers have used the "Policy Statement," particularly Paragraph 62 -- which by TIA's own admission at the July 27 meeting would apply equally to prohibit the manufacturers' repair procedures -- selectively against C2+ and other providers of emulated extension services because those services adversely affect the carriers' monthly recurring revenue stream while the manufacturers' repair services preserve it.

Thus, the record clearly supports Dr. Levine's conclusion that the only "foreseeable effect" of the current rule and the "Policy Statement" is to "prevent legal provision of emulated extension mobile stations" and other benefits to legitimate subscribers. Consequently, we believe that the public interest requires significant modification of the "Policy Statement" and Section 22.919 of the Rules. We have endeavored in the attached proposal to achieve the following objectives:

1. To preserve and enhance the industry's ability to combat ESN-based cellular fraud;

2. To preserve the obvious consumer benefits which result from the existing repair procedures described by the manufacturers and from proper use of "extension" cellular phones which emit the ESN of the subscriber's primary cellular phone, thereby ensuring that the subscriber will be billed properly by the carrier for calls using the extension phones;

3. To set forth more clearly the responsibilities of manufacturers, carriers, extension service providers and consumers in combatting cellular fraud; and

4. To ensure that "extension" cellular phones are used properly by subscribers; to compensate carriers fairly and reasonably where a cellular subscriber uses cellular extension phones improperly, resulting in additional cost to the carrier; and to require persons using cellular extension phones improperly to bear the resultant costs.

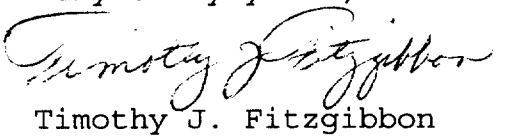
We encourage other parties to suggest any changes, additions, deletions or other proposals which would better serve all of the above objectives. We remain available to discuss these proposals with the Bureau and the other parties.

Finally, there are two additional matters which we have not addressed directly because they are beyond the scope of the ESN issues addressed by Section 22.919 and the "Policy Statement" and we do not want to unduly expand the topics of discussion and the time burden on the Commission. However, they relate to the issue of cellular fraud and the Commission should be aware of these matters as it considers this proposal. First, there are other rules which could be added or modified to combat more effectively non-ESN based cellular fraud and to protect against malicious system hacking. We are available to discuss with the Commission at a later appropriate time additional measures that could be implemented to fight cellular fraud accomplished through "hijacking" and other means.

Second, the industry consensus appears to be that authentication will provide a greater degree of security against cellular fraud and is not inherently inconsistent with extension cellular service. C2+ and other providers of emulated extension services could greatly assist the industry in upgrading mobile stations to incorporate authentication software by offering this service whenever a subscriber requests an emulated extension phone. C2+ also could upgrade software in some cellular mobile stations to eliminate flaws which enable ESNs to be modified using the keypad on the mobile station. We believe that these services would expedite the conversion to authentication, thereby reducing cellular fraud, and we would be willing to provide these services if agreement can be reached with the manufacturers.

As set forth on the attached service list, copies of this letter and all attachments have been sent by mail to CTIA, McCaw, TIA, the Department of Justice, the Independent Cellular Services Association and each of the Commission representatives attending the July 27 meeting. Two copies also were hand-delivered to the Secretary's office today. Thank you again for your efforts in providing this opportunity to present our proposal and to attempt to reach some consensus among the parties on these issues. We look forward to further discussions with you and the other parties to resolve the issues raised in the pending petitions for reconsideration.

Very truly yours,



Timothy J. Fitzgibbon
Counsel for
C-Two-Plus Technology

TJF:kdd
Enclosures

EXHIBIT ONE

PROPOSED RULE SECTION 22.919

§22.919 - Electronic Serial Numbers

(a) Definitions -- The following definitions shall apply for purposes of this section:

(1) Electronic Serial Number ("ESN") -- The ESN is a 32-bit binary number that together with the Mobile Identification Number ("MIN") identifies a cellular mobile station to any cellular system thereby enabling the cellular carrier to bill properly for all calls made or received by that mobile station.

(2) Operation -- A cellular mobile station is deemed to be in operation at any time during which it is powered on, regardless of whether it is then making or receiving a call.

(3) Extension Service Provider -- Any person who performs any service which involves the manipulation of the ESN of a cellular mobile station as permitted under subsection (c)(1) and/or (c)(2).

(4) Primary Cellular Mobile Station -- A cellular mobile station which is owned by a subscriber, registered with the subscriber's cellular system, and for which the subscriber receives a separate monthly bill from the system operator.

(5) Secondary Cellular Mobile Station -- A cellular mobile station owned by a cellular subscriber which is programmed to emit the ESN of that subscriber's Primary Cellular Mobile Station.

(b) Type-Acceptance of Cellular Mobile Stations -- In addition to the general requirements for type-acceptance set forth in Part 2 and Section 22.377 of the Commission's Rules, cellular mobile stations must be designed to comply with the following technical requirements:

(1) Any cellular mobile station initially type-accepted after _____ [a date approximately three months after the effective date of this rule] must be designed to comply with industry standards for authentication key and challenge-response calculation procedures established by the Telecommunications Industry Association.

(2) All other cellular mobile stations must be designed to comply with the Cellular System Compatibility Specification (see §22.933).

(c) Prohibited ESN Alterations -- No person shall remove, obliterate, transfer, alter, tamper with, or otherwise manipulate the original, manufacturer-installed ESN of a cellular mobile station, or otherwise cause a mobile station to transmit an ESN other than the original ESN installed by the manufacturer, except as set forth in subsections (c)(1) through (c)(3) [or (c)(4)]:

(1) Upon the written authorization of a cellular subscriber, the ESN of that subscriber's Primary Cellular Mobile Station may be copied, emulated, or otherwise programmed into one or more mobile stations owned by that subscriber in order to create Secondary Cellular Mobile Station(s), provided that the ESN of the Primary Cellular Mobile Station is not changed, altered or otherwise modified;

(2) The original ESN of a cellular subscriber's Secondary Cellular Mobile Station may be restored upon the written authorization of a cellular subscriber; and

(3) The ESN of a mobile station may be manipulated by its manufacturer or the authorized representative of its manufacturer during the course of repair and upgrade of that mobile station. When a cellular mobile station has been taken out of service and returned to the manufacturer, the manufacturer may reprogram that cellular mobile station with a new ESN in order to resell it after it has been restored to proper working order.

[(4) Where the subscriber's ESN has been incorporated into a hardened, separable, subscriber identity module ("SIM") which also embodies the industry standard authentication data and processing as set forth in subsection (b)(1), the subscriber may physically move the ESN by moving the SIM from one mobile station to another provided that:

(i) both mobile units are designed and equipped to operate with a SIM;

(ii) the ESN in the SIM is not changed, altered or otherwise modified; and

(iii) the SIM properly identifies the subscriber for billing purposes.]

(d) Extension Service Provider Requirements -- Any person performing any ESN procedure permitted pursuant to subsections (c)(1) and/or (c)(2), must comply with the following requirements:

(1) Prior to performing any ESN procedure authorized pursuant to subsections (c)(1) and/or (c)(2), the Extension Service Provider must: (i) notify the operator of the subscriber's home cellular system by telephone and/or facsimile that the subscriber has authorized such ESN procedure; and (ii) provide the subscriber with a copy of subsection (e) of this section.

(2) The notice to the system operator required by subsection (d)(1)(i) shall provide the system operator with the subscriber's name, address and mobile identification number(s); the make, model and ESN of the affected cellular mobile station(s); the name and address of the Extension Service Provider performing the procedure; and the rule provision pursuant to which the procedure is being performed.

(3) The Extension Service Provider shall refuse to perform any ESN procedure for a customer and shall retain a copy of any identification provided by the customer if the carrier, at the time of the notice required pursuant to subsection (d)(1)(i), immediately informs the Extension Service Provider that the customer:

(i) is not a currently authorized subscriber to the carrier's cellular system;

(ii) is not authorized to use the Primary Cellular Mobile Station identified by the customer on the carrier's cellular system; or

(iii) has identified as his or her Primary or Secondary Cellular Mobile Station a cellular mobile station which has been reported to be stolen.

(e) Operation of Cellular Mobile Stations -- Simultaneous operation of Primary and/or Secondary Cellular Mobile Stations emitting the same MIN/ESN combination is prohibited and is cause for suspension of service by the carrier. Where service has been suspended by the carrier pursuant to this provision, a subscriber may be required to pay a re-activation charge which shall not exceed the lowest service initiation charge assessed by the carrier for a single mobile station.

(f) Obligation to Provide Service -- A cellular carrier may not deny service to a cellular subscriber based on the subscriber's use of one or more Secondary Cellular Mobile Stations, except where service is suspended pursuant to subsection (e), and may

not refuse to restore service if the subscriber pays the re-activation charge pursuant to subsection (e).

(g) Unauthorized Interception of ESN Transmissions -- No person other than the licensed operator of a cellular base station shall: (i) transmit signals to a mobile station, regardless of the level of transmitted power used, which cause the mobile station to transmit its MIN, ESN, random challenge-response data, or other billing identification variable; or (ii) intercept the transmission of the MIN, ESN, random challenge-response data, or other billing identification variable of a cellular mobile station, except where such interception is authorized by an order issued by a Court of competent jurisdiction. This subsection (g) shall not apply to: (i) procedures used by a manufacturer, or the authorized agent of a manufacturer, engaged in the repair of a subscriber's mobile station pursuant to written authorization from the subscriber; or (ii) a subscriber's use of a low power home base station properly authorized by the Commission which enables the subscriber to use a cellular mobile station as a cordless telephone.

EXHIBIT TWO

EXPLANATION OF PROPOSED RULE PROVISIONS

§22.919

(a)(1) -- In its Report and Order, the Commission stated that the primary function of the ESN is to "enable the carriers to bill properly for calls made from the telephone." Report and Order at ¶54. The proposed provision incorporates this language into the definition and includes a reference to the Mobile Identification Number ("MIN") which also is essential to proper billing.

This definition and the proposed rule are intended to combat cellular fraud by prohibiting: (a) ESNs from being transferred or altered without the authorization of the owner of the mobile unit(s) involved; (b) ESN transfers to phones not owned by an authorized user; and (c) modification of ESNs, even when authorized by the owner of the mobile station, if the result of the modification is that the mobile station transmits an ESN which no longer accurately "identifies the mobile station," thereby undermining the carriers' ability to "bill properly" for calls using that mobile station. See TIA Petition for Reconsideration and Clarification at 3. At the same time, the proposed definition and rule will allow a subscriber the convenience of using extension cellular phones programmed to emit the ESN of that subscriber's primary cellular phone which already is registered with the carrier, thereby ensuring that calls using the extension(s) will be billed properly to the subscriber.

The requirements of the Cellular Compatibility Specifications (including the uniqueness requirement) are retained for the manufacture of mobile stations initially type-accepted before the date set in subsection (b)(1). Mobile stations initially type-accepted after that date must comply with the authentication standards established by TIA. At the July 27 meeting and on the Meeting Agenda, the Commission acknowledged that the Cellular Compatibility Specification (from which the ESN definition in the current rule is derived) "sets forth design criteria to be met by manufacturers as a condition of type acceptance of cellular telephones." (emphasis added) Thus, the intended scope of the Compatibility Specification (and the "uniqueness" requirement therein) is preserved with respect to the design and manufacture of cellular mobile stations through proposed subsection (b)(2). However, the proposed rule allows manufacturers and others to perform limited ESN procedures on mobile stations owned by legitimate subscribers where those procedures provide significant benefits to subscribers without jeopardizing billing accuracy.

Finally, with respect to the other purported purpose of the ESN mentioned in Paragraph 54 the Report and Order, -- i.e. that it is "similar to the Vehicle Identification Numbers in automobiles" and "uniquely identifies the equipment in order to assist in recovery if it is stolen" -- there is no record evidence in this proceeding to support the contention that the ESN serves this purpose in the first place. Moreover, mobile stations already have a separate manufacturer's serial number

which serves this purpose. That serial number is readily observable as opposed to the ESN and is, therefore, far better suited for this purpose.

(a)(2) -- This definition is used in subsection (e) to clarify to consumers that two cellular phones with the same MIN/ESN combination may not be powered on at the same time, even if they are not being used to make or receive calls at the same time. Until appropriate standards are developed which would enable the carrier to separately identify each extension phone used by a subscriber, this restriction is required for extension phone (and MUSDN) users.

(a)(3) -- This provision identifies the person performing the ESN procedure necessary to create a Secondary Cellular Mobile Station for a subscriber. Subsection (d) and some of the Additional Restrictions in Exhibit 3 would impose certain notice, recordkeeping and/or other requirements on such persons.

(a)(4) -- This definition identifies the mobile station which a subscriber seeking emulated extension service already has registered with the carrier and for which the subscriber already receives a monthly bill from the carrier. Essentially, this definition identifies the "control" ESN which will be used for that subscriber's emulated extensions. Pursuant to this proposal, the subscriber's "control" ESN could not be changed in any way by an Extension Service Provider.

(a)(5) -- This definition identifies the subscriber's emulated extension phones.

(b)(1) -- This provision is taken from subsection (d) of the proposed rule modification jointly submitted by TIA and CTIA on February 2, 1995. The date for complying with authentication standards would be approximately three months from the effective date of the rule to give manufacturers sufficient time to achieve compliance.

(b)(2) -- This provision incorporates the current requirements for design of cellular mobile stations which were initially type accepted prior to January 1, 1995. We have not incorporated the "hardening" requirements in the current rule provisions because all parties other than CTIA and McCaw agree that these provisions will add nothing to fraud prevention and will simply add cost to the consumer. In any event, to the best of our knowledge, no new cellular mobile station has been initially type accepted between January 1, 1995 and the present.

(c) -- The overall intent of this subsection is to combat cellular fraud by prohibiting all transfers or manipulations of the ESN initially installed by the manufacturer, except for certain procedures which clearly benefit consumers and present minimal risk of cellular fraud. In addition, the prohibition against "other procedures which cause a mobile station to transmit an ESN other than the one originally installed by the manufacturer," is intended to combat fraudulent use of a mobile

station accomplished by programming the phone to emit different ESNs without tampering with the original ESN, which remains intact in the mobile station's memory. The rule also would facilitate prosecution where a mobile station has been programmed to transmit a fraudulent ESN and then to erase the data used to transmit the fraudulent ESN.

Essentially, the rule prohibits anyone other than the manufacturer from modifying in any way the "control" ESN for each subscriber (i.e. the ESN of the subscriber's Primary Cellular Mobile Station), but permits Extension Service Providers to place that ESN, without change, into additional mobile stations owned by the subscriber. If the subscriber's Primary Cellular Mobile Station is registered properly with the carrier, and the only permitted ESN procedure is the placement of that ESN into extensions to be used by that subscriber, all calls from the extensions will be billed properly to the subscriber.

Although we have not proposed it as part of this rule, we believe that there is one circumstance under which the Commission may want to permit a change in a subscriber's "primary" ESN -- with proper advance notice to the carrier and a new ESN provided by the manufacturer. A subscriber who has been victimized by cloning fraud may find it easier and more economical to change his or her ESN and retain the existing mobile identification number because the MIN is printed on the subscriber's business cards, advertisements and other business materials. By changing the ESN, the subscriber can stop the fraudulent use of

his or her previous ESN/MIN combination which has been cloned illegally, while retaining the use of the existing MIN. Although we believe that this is another example of a non-fraudulent ESN transfer which clearly benefits consumers, and C2+ is capable of providing this service, we have not proposed to do so here in order to avoid any claims that changing the "control" ESN would increase the potential for fraud.

(c)(1) -- This provision is intended to permit a cellular subscriber to purchase additional mobile stations ("Secondary Cellular Mobile Stations") and to have them programmed to emit the ESN of the mobile station which the subscriber already has registered with the carrier and for which he already receives and pays a monthly bill ("Primary Cellular Mobile Station"). By programming the Secondary Cellular Mobile Station to emit the ESN of the Primary Cellular Mobile Station, the subscriber ensures that all calls using the Secondary Station will be billed properly by the carrier to the subscriber's account.

(c)(2) -- The purpose of this provision is to allow the subscriber to have the original ESN of his Secondary Cellular Mobile Station restored in the event the subscriber wants to sell, exchange or return that phone, or to register it with the cellular carrier as another Primary Cellular Mobile Station.

(c)(3) -- This provision is intended to provide manufacturers with the flexibility to: (a) perform on-site repairs where software "fixes" are required at retail or other locations outside

the factory; and (b) refurbish a damaged phone for which the manufacturer has provided a replacement to the customer and to program a new ESN into that phone so that it may be resold.

[(c)(4) -- This provision was included to address the situation in which authentication software is incorporated into a moveable Subscriber Identity Module ("SIM") chip as described in the Levine Report at 7-12. The carriers and the Commission have expressed the desire to "harden" the billing identification data of a mobile unit, i.e. to make such data immune to alteration. This rule provision permits the use of a hardened moveable authentication-based SIM, which appears to be the preferred method in the next generation of personal communications technology. Id. Current rule §22.919 and the modification jointly proposed by CTIA/TIA would forbid the technological advance of having a separable hardened identity module. Id. at 11-12.]

(d)(1) -- This provision is intended to ensure that cellular carriers will be notified properly any time that one of their subscribers seeks to obtain an emulated extension or replacement phone.

(d)(2) -- This provision is intended to fight fraud by prohibiting Extension Service Providers from providing any of the services otherwise authorized under subsections (c)(1) and/or (c)(2) if, at the time the Extension Service Provider gives the notice required pursuant to subsection (d)(1), the carrier

informs the Extension Service Provider that the customer seeking the service: (a) is not a currently authorized cellular subscriber; (b) is not authorized to use the Primary Cellular Mobile Station which he has identified; or (c) has presented a Primary or Secondary Cellular Mobile Station which has been reported as stolen. Retention of copies of the identification provided by such customers is intended to facilitate investigation by appropriate authorities.

(e) -- This provision serves several purposes. First, it is intended to ensure that subscribers with emulated extension phones will have only one phone powered on at a time. Dr. Levine's Report stated that when used properly, emulated extension phones present no additional burden, harm or cost to the cellular carrier. Levine Report at 1-4. To the extent that carriers deploy RF fingerprinting in the future, the added cost of fingerprinting an extension phone will be minimal (and carriers will be required to fingerprint additional MUSDN phones for subscribers in any event). The nominal cost of fingerprinting an additional phone for the subscriber should be more than offset by increases in air-time revenues.

Second, this provision is intended to address the situation in which a subscriber improperly uses emulated extension phones by having more than one phone powered on at a time. Where such improper use results in a fraud alert based on the carrier's normal fraud detection procedures, this provision would allow the carriers to interrupt service to that customer immedi-

ately and to restore service only: (a) after the fraud alert is determined to be a false alarm caused by the customer's simultaneous operation of two phones; and (b) if the customer agrees to pay a reactivation fee. However, where the alarm is determined to be the result of a "sneak path" problem in the carrier's system (see Levine Report at 23), the subscriber may not be charged a reactivation fee. The proposal to cap the reactivation fee at the lowest activation charge assessed by the carrier for a single mobile station is to prevent the carriers from discouraging customer use of emulated extension service by charging exorbitant reactivation fees. Thus, this provision is intended to: (a) deter improper operation of extension phones by legitimate subscribers; (b) allow the carrier to interrupt service until it can be determined that a fraud alert was triggered by improper extension use rather than illegal cloning or a "sneak path" problem; (c) allow the carrier to recover its reasonable cost when a subscriber triggers a fraud alert through improper use of an extension phone; and (d) require a subscriber using extension phones improperly to bear the cost of such improper use.

(f) -- This provision is intended to prohibit carriers from denying service to subscribers based on their use of emulated extension phones.

(g) -- This provision is intended to prohibit persons from causing or intercepting the transmission of a cellular sub-

scriber's MIN/ESN for the purpose of stealing it. It is also intended to prohibit repeated interrogation of a mobile unit to attempt to crack its authorization protocol. The rule is not intended to prohibit a manufacturer's use of equipment which causes or intercepts the transmission of an ESN during normal repair procedures. Likewise, it is not intended to prohibit a subscriber's legitimate use of certain products approved by the Commission which enable the subscriber to use a mobile station as a cordless phone.

EXHIBIT THREE

ADDITIONAL RESTRICTIONS

In addition to the requirements set forth in subsection (d) of the proposed rule, C2+ would be willing to place any or all of the following additional restrictions on the ESN procedures performed pursuant to subsections (c)(1) and (c)(2) and/or the persons performing such procedures. These additional restrictions could be included in additional rule provisions, set forth in the form of a "policy statement" in the Reconsideration Report and Order, or otherwise implemented. Each restriction and the underlying rationale is set forth below.

1. Prior to performing any ESN procedures permitted under subsections (c)(1) and/or (c)(2), the Extension Service Provider performing the ESN procedure must obtain a driver's license or other photo identification and a credit card from the customer requesting the procedure and must retain a copy of each form of identification for a period of ___ years.

C2+ currently requires customers to provide photo identification, usually in the form of a driver's license, in order to identify the customer and to reduce "subscription" fraud. The credit card requirement would add another level of protection and would assist in catching persons engaging in "subscription fraud" by presenting falsified driver's licenses. Retention of the records potentially could assist law enforcement and the carriers in tracking down persons obtaining service fraudulently.

2. Prior to performing any ESN procedures permitted under subsections (c)(1) and/or (c)(2), the Extension Service Provider performing the ESN procedure must obtain a copy of the customer's most recent cellular bill and retain a copy of that bill.

C2+ currently requires each customer to provide a copy of the customer's most recent monthly bill for cellular service in order to demonstrate that the customer is a bona fide subscriber and to cross-check against other forms of identification provided by the customer. The bill could be used in conjunction with the carrier notification procedures under subsection (d) of the proposed rule to verify the identity of the customer.

3. The written agreement between the customer and the Extension Service Provider must include the following provisions:

> (a) a warning that obtaining cellular service under false pretenses or using a cellular phone programmed to emit the ESN of another customer or an invalid billing account is a criminal violation under Title 18; and
>
> (b) a notice that the subscriber's simultaneous operation of more than one mobile station with the same MIN/ESN combination is a violation of Commission Rules, grounds for suspension of service by the carrier, and may result in the assessment of re-activation charges to restore service.

The intent of 3(a) is to inform all customers that they are subject to criminal prosecution if they obtain cellular service using false pretenses or use mobile stations programmed with unauthorized or invalid ESNs. The agreement executed by the customer would be evidence that any customer that obtained service fraudulently did so knowingly and willfully.

The intent of 3(b) is simply to inform the customer of the proper use of emulated extension phones and the potential service interruption and penalty if the phones are used improperly.

4. An Extension Service Provider performing an ESN procedure authorized pursuant to subsection (c)(1) or (c)(2) must also:

> (a) place a tag on the mobile station including the name, address and telephone number of the Extension Service Provider and the date the ESN procedure was performed [or enter such identification data into a predesignated unused part of the mobile station memory];
>
> (b) hold a valid FCC Radiotelegraph Operator's Certificate of Second Class or above, as specified in Part 13 of the Commission's Rules;
>
> (c) use a transfer method which requires encrypted authorization codes controlled by a designated person or persons within the company in order to transfer or copy an ESN for the purpose of creating a Secondary Cellular Mobile Station; and/or
>
> (d) retain and make available to the FCC and/or the relevant cellular carrier records of each ESN procedure performed for a period of at least two years including: (i) the name, address and MIN of the customer; (ii) the make, model and ESN(s) of the mobile station(s) involved; (iii) copies of identification materials provided by the customer; and (iv) the date of the ESN manipulation.

The purpose of 4(a) is to facilitate follow-up by law enforcement officials and/or the carriers in the event that an emulated phone is found to have been used fraudulently or in the commission of a crime. In such cases, appropriate authorities can readily determine the identity of the Extension Service Provider who performed the emulation procedure and obtain any identification records or other information which may assist in the prosecution of the customer. Rather than storing this information on a tag that might be removed, the information could be stored in an unused data field in the phone if agreement could be reached with the manufacturers on which data field to use.

The intent of 4(b) is to require Extension Service Providers to hold FCC licenses so that the Commission is certain to have jurisdiction over those providers. Providers found to violate any rules or policies of the Commission would be subject, among other things, to significant forfeiture penalties under Section 503 of the Communications Act.

The intent of 4(c) is to require Extension Service Providers to use encrypted methods to transfer ESNs such that authorization codes must be obtained from a designated control person or persons within the company in order to effectuate the desired transfer. C2+ already uses encrypted methods which require codes based on: (a) the ESNs of the phones involved in the transfer; (b) the particular decryption device used to complete the transfer; and (c) additional control data known only to C2+. Ericsson Corporation indicated in its Reply Comments in the rulemaking proceeding that it uses similar encryption methods to transfer ESNs. See Ericsson Reply Comments, filed Nov. 5, 1992 at 4 and n.6. Use of such encrypted methods would: (a) protect against fraudulent or unauthorized ESN transfers by employees of the Extension Service Provider; (b) prevent transfer to the Secondary Cellular Mobile Station of any ESN other than the ESN of the subscriber's Primary Cellular Mobile Station; and (c) facilitate retention of accurate records of each ESN procedure performed by the Extension Service Provider.

The intent of 4(d) is to require Extension Service Providers to retain records which may be useful to authorities in